CLAIMS

What is claimed is:

1. A wireless communication device, comprising:

a serial interface, the serial interface configured to accept input data at a first voltage, the input data including a control signal for an integrated circuit component;

a local level shifter, the local level shifter configured to accept a portion of the control signal at the first voltage, the local level shifter configured to maintain a shifted control signal, where the shifted control signal is at the operating voltage of the integrated circuit component, and where the shifted control signal controls the operation of the integrated circuit component; and

a data latch, the data latch configured to accept the portion of the control signal at the first voltage level from the serial interface, the data latch configured to output the portion of the control signal at the first voltage to at least the local level shifter, where the local level shifters is configured to maintain the shifted control signal while the integrated circuit is operating in standby.

2. The wireless communication device of claim 1, further comprising:

a second local level shifter, the second local level shifter configured to accept a second portion of the control signal at the first voltage, the second local level shifter being configured to maintain a second shifted control signal, where the second shifted control signal is at the operating voltage of a second integrated circuit component, where the second shifted control signal controls the operation of the second integrated circuit component;

a second data latch, the second data latch configured to accept the second portion of the control signal at the first voltage level from the serial interface, the second data latch configured to output the second portion of the control signal at the first voltage level to the second local level shifter, where the second local level shifters is configured to maintain the second shifted control signal while the integrated circuit is operating in standby.

3. The wireless communication device of claim 1, where the serial interface is a shift register.

4. The wireless communication device of claim 1, where the input data is generated by a baseband module.

5. The wireless communication device of claim 1, where the first voltage is the operating voltage of a baseband module integrated circuit.

6. The wireless communication device of claim 1, where the first voltage is less than the operating voltage of the integrated circuit component.

7. The wireless communication device of claim 1, where the integrated circuit is a radio frequency integrated circuit.

8. The wireless communication device of claim 1, where the integrated circuit component is a synthesizer.

9. The wireless communication device of claim 2, where the operating voltage of the second integrated circuit component is different from the operating voltage of the first integrated circuit component.

10. A system for maintaining radio frequency integrated circuit programming during standby, comprising:

means for accepting input data at a first voltage, the input data including control signals for a plurality of integrated circuit components;

means for distributing the control signals to the plurality of integrated circuit components;

means for converting the control signals at the first voltage to shifted control signals at the operating voltage of the integrated circuit components; and

means for maintaining the shifted control signals at the integrated circuit components during standby.

11. The system of claim 10, where the means for accepting input data is a shift register.

12. The system of claim 10, where the input data is generated by a baseband module.

13. The system of claim 10, where the first voltage is the operating voltage of a baseband module integrated circuit.

14. The system of claim 10, where the first voltage is less than the operating voltage of the integrated circuit component.

15. The system of claim 10, where the integrated circuit is a radio frequency integrated circuit configured to operate in a wireless communication system.

16. The system of claim 10, where the means for converting is a means for converting the control signals at the first voltage level to shifted control signals at a plurality of integrated circuit components operating voltages.

17. The system of claim 10, where one of the integrated circuit component is a synthesizer.

18. A method for maintaining radio frequency integrated circuit programming during standby, comprising the steps of:

accepting integrated circuit input data at a first voltage, the input data including control signals for a plurality of integrated circuit components;

distributing the control signals to the plurality of integrated circuit components;

converting the control signals at the first voltage to shifted control signals at the operating voltage of the integrated circuit components; and

maintaining the shifted control signals at the integrated circuit component during standby.

19. The method of claim 18, where the step of accepting input data includes the use of a shift register.

20. The method of claim 18, where the input data is generated by a baseband module.

21. The method of claim 18, where the first voltage is the operating voltage of a baseband module integrated circuit.

22. The method of claim 18, where the first voltage is less than the operating voltage of the integrated circuit component.

23. The method of claim 18, where the integrated circuit is radio frequency integrated circuit configured to operate in a wireless communication system.

24. The method of claim 18, where the step of converting includes the step of converting the control signals at a the first voltage level to shifted control signals at a plurality of integrated circuit component operating voltages.

25. The method of claim 18, where one of the integrated circuit component is a synthesizer.

26. A computer readable medium having a program for maintaining radio frequency integrated circuit programming during standby, comprising:

logic for accepting input data at a first voltage, the input data including control signals for a plurality of integrated circuit components;

logic for distributing the control signals to the plurality of integrated circuit components;

logic for converting the control signals at the first voltage to shifted control signals at the operating voltage of the integrated circuit components; and

logic for maintaining the shifted control signals at the integrated circuit components during standby.

27. The program of claim 26, where the logic for accepting input data is a shift register.

28. The program of claim 26, where the input data is generated by a baseband module.

29. The program of claim 26, where the first voltage is the operating voltage of a baseband module integrated circuit.

30. The program of claim 26, where the first voltage is less than the operating voltage of the integrated circuit component.

31. The program of claim 26, where the integrated circuit is a radio frequency integrated circuit configured to operate in a wireless communication system.

32. The program of claim 26, where the logic for converting is logic for converting the control signals at the first voltage level to shifted control signals at a plurality of integrated circuit components operating voltages.

33. The program of claim 26, where one of the integrated circuit component is a synthesizer.